

Murashige, Kate H.

From: L SCOTT [lionel.scott@btinternet.com]
Sent: December 13, 2007 12:57 PM
To: Murashige, Kate H.
Subject: Inventorship issues on Plant Bioscience cases
Attachments: 4241165263-Inventorship observations 13.DEC.07.doc

Dear Kate Murashige,

I think inventorship should be reviewed on certain of your cases, notably, on US patent application numbers: 11/390,519, 11/013,469, 11/013,531, 11/013,315, 11/013,316 and 10/805,804, all in the name of Plant Bioscience Ltd. and all claiming foreign priority from GB 9925459.1 filed on 27th October 1999. I attach a letter setting out the reasons why. I will send a copy of this letter to you by mail which will probably get to you in the New Year.

Yours sincerely,

Lionel Scott

1/22/2008

Exhibit 1

PRIVATE AND CONFIDENTIAL

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13th December 2007

FAO: Kate H. Murashige

Morrison and Foerster LLP
12531 High Bluff Drive
Suite 100
San Diego
CA 92130-2040
UNITED STATES OF AMERICA

Dear Kate,

Re: Inventorship on US patent application nos.: 11/390,519, 11/013,469, 11/013,531, 11/013,315, 11/013,316 and 10/805,804, all in the name of Plant Bioscience Ltd. and all claiming foreign priority from GB 9925459.1 filed on 27th October 1999.

I believe that the inventorship of the above patent applications where claims can be construed as reading onto the diagnosis or treatment of disease states whether in whole or in part in higher organisms, such as mammals, should be reviewed.

I provide the following points in support:

1. In 1999 I was the in house manager of the Plant Bioscience patent portfolio.
2. I was informed that the scientists had given a talk at a date earlier than the priority date and was asked to see if there was anything patentable that could be rescued in those countries where a grace period operated in the face of disclosures by the inventors.
3. I read the disclosures and it occurred to me that what the inventors had found in plants, namely, the existence of short RNA species could be of enormous practical importance in mammals and in particular in the treatment and/or diagnosis of diseases in which genes and their products ie RNA species are known to play a role, in eg cancerous disease and viral disease.

4. In the preparatory period leading up to the filing of October 1999, it was apparent that the two current inventors (Baulcombe and Hamilton) had not conceived of the above-mentioned possibilities and I spoke with Andrew Hamilton on the matter. I said that their research had quite possibly opened a "Pandora's Box" for a realistic nucleic acid-based treatment for cancerous and viral diseases, and diagnoses. At the time, both inventors were plant-centred in both their thinking and in their researches and had not conceived of the above possibilities.
5. A publication in the top-rated Science journal (Hamilton AJ, Baulcombe DC (1999) A species of small antisense RNA in post-transcriptional gene silencing in plants. *Science* 286: 950-952) on the discovery of short RNAs did not mention therapeutic possibilities, nor did it allude to the possibilities open to genetic engineering using such short RNAs in a role relating to a therapeutic or diagnostic context in higher organisms.
6. In the construction of the priority filing, I ensured that what could be placed in that filing on the use of SRMS and/or SARMS in a therapeutic and/or diagnostic context was placed in the application. This was done to provide the applicant with some basis to claim elements of diagnosis or treatment using the technology.
7. When I left PBL, there was one application in place in the USA and this has subsequently been granted as US 6,753,139 and is limited to claims to: a method of detecting the silencing of a target gene in a plant, a method of identifying a silenced target gene in a plant in which gene silencing is detected, a process for isolating one or more RNA molecules associated with target gene silencing from a sample of material from a plant, and a process for isolating a silencing agent comprising SRMs for a target gene from a plant. The inventorship on this granted patent is correct and I make no suggestion that I should be nominated on the inventorship on this patent.
8. I discover now that there are a further six applications that all take priority from the GB case filed in October 1999, and these appear to me to include claims on which I ought to be nominated as an inventor as of right. Many of the claims clearly read onto *inter alia* methods of silencing target genes in organisms that are clearly dependent on the introduction of SRMs (which may be synthetic) into an organism (which may be a higher order one), such as a mammal. There would appear to be nothing in such claims to suggest that the gene silencing would not be performed outside of a therapeutic or diagnostic context.
9. I was the person that first recognised that the SRMS/SARMS technology could be used for the silencing of genes in higher organisms outside of plants and nematodes, in a therapeutic and/or a diagnostic context: the intellectual input for these aspects came from me.

I am sure that you will have comments and questions on the above, and I would be happy to answer any queries that you may have.

Yours sincerely,

Lionel Scott